Applicant: Takuya Tamatani et al. Attorney's Docket No.: 14539-004012 / JF-52US-D5-C2

Serial No.: 10/721,404 Filed: November 25, 2003

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## REMARKS

Claims 53-59, 64-66, 68, and 69 are pending in the application. No amendments have been made by the present response.

### Priority

At pages 2-3 of the Office Action, the Examiner maintained the assertion that priority application USSN 09/383,551 does not provide adequate support under 35 U.S.C. § 112 for claims 53-59, 64-66, 68, and 69. According to the Examiner,

[i]t is acknowledged that in view of the disclosure of use of the polypeptides in searching for molecules that interact with them, it would be obvious to one of ordinary skill in the art that the "use" may include the steps of "contacting the polypeptide with a test substance" and "determining whether the test substance interacts with the polypeptide." However, these steps are not implicit in the disclosure, because, as one of ordinary skill in the art is aware, searching for molecules that interact with a polypeptide does <u>not necessarily</u> include the steps of contacting and determining, because the searching can be done, for example, in silico, wherein the searching is performed by a computer algorithm.

Obviousness is not the standard for the addition of new limitations to the disclosure as filed. Entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed. Lockwood v. American Airlines Inc., 41 USPO2d 1961 (Fed. Cir. 1977).

Independent claim 53 is directed to a method of identifying a substance that interacts with a polypeptide comprising an extracellular region (or a variant thereof in which one to ten amino acid residues are substituted, deleted or added) of the human JTT-1 protein of SEQ ID NO:2.

As detailed in the response to the first Office Action, applicants respectfully submit that the following passage from the specification (at page 115, line 21 to 26) contributes to the written description support of the claims.

The genes (DNA), polypeptides, polypeptide fragments and antibodies of the present invention are useful not only as pharmaceuticals but also as reagents for searching molecules (ligands) interacting with the cell surface molecules of the present invention, clarifying the function of the ligand, and developing drugs targeting the ligands.

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The foregoing passage states that the polypeptides and polypeptide fragments of the invention are useful as reagents for searching for molecules that <u>interact</u> with the cell surface molecules of the invention. A person of ordinary skill in the art reading the passage reproduced above would understand that searching for a molecule that "interacts" with a polypeptide requires assessing the ability of a molecule to physically bind to the polypeptide, which necessarily involves the basic steps of contacting the polypeptide with a molecule and determining whether binding occurs. On the other hand, methods that do not measure (directly or indirectly) an actual physical interaction between a molecule and the polypeptide would merely constitute a search for a <u>candidate ligand</u>. For example, *in silico* screening (which was mentioned in the Office Action) may be used to identify candidate binding molecules but is unable to determine conclusively whether a molecule "interacts" with a JTT-1 polypeptide. Any candidate binding molecule identified by an *in silico* screen could only be determined to be an actual "interacting" molecule by contacting the JTT-1 polypeptide with the molecule and determining whether the molecule interacts with the polypeptide.

Contrary to the assertions in the Office Action, the claimed methods are not mere obvious extensions of that which is disclosed in the application. Instead, a person of ordinary skill in the art reading the passages identified herein would readily understand the specification to implicitly describe the steps of contacting a JTT-1 polypeptide with a test substance and determining whether the test substance interacts with the polypeptide. Consistent with the foregoing assertions, newly added claims may be supported in the specification through express, implicit, or inherent disclosure that allows persons of ordinary skill in the art to recognize that the inventor invented what is claimed. MPEP § 2163. The specification need not describe the claimed subject mater identically in order to satisfy the written description requirement. Purdue Pharma L.P. v. Faulding Inc., 230 F.3d 1320, 1323 (Fed. Cir. 2000).

In view of the foregoing comments, applicants respectfully submit that claims 53-59, 64-66, 68, and 69 are fully supported in the specification as filed and should be accorded the priority date of prior application USSN 09/383,551.

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### 35 U.S.C. §103(a) (Obviousness)

At pages 3-4 of the Office Action, claims 53-59, 64-66, 68, and 69 were finally rejected as allegedly obvious over Tamatani et al., U.S. Published Application No. 20020115831 ("Tamatani").

Tamatani belongs to the same patent family as the present application and claims priority to USSN 09/383,551. As detailed herein, independent claim 53 and the claims that depend therefrom are entitled to the priority date of prior application USSN 09/383,551. As a result, Tamatani does not constitute prior art against any of the pending claims. Applicants respectfully request that the Examiner withdraw the rejection.

### Obviousness-Type Double Patenting

At page 4 of the Office Action, claims 53-59, 64-66, 68, and 69 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as allegedly unpatentable over claims 1-24 of co-pending and commonly assigned application serial number 10/800,250.

In view of the remarks presented herein, it is applicants' understanding that the provisional obviousness-type double patenting rejection is the only rejection remaining in the application. Accordingly, the double patenting rejection should be withdrawn to permit the present application to issue as a patent.

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# CONCLUSION

Applicants submit that all grounds for rejection have been overcome, and that all claims are in condition for allowance, which action is earnestly requested.

Please apply any charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 14539-004012.

Respectfully submitted,

Date: March 26, 2007

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